

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1 - 8. (Cancelled).

9. (Currently Amended) An image processing device comprising:

a processor for:

setting a character model;

setting a plurality of light source models illuminating the character model;

creating a plurality of shadow models to display shadows created by the plurality of light source models, the plurality of shadow models having non-color values and non-transparency values;

setting a plurality of gradation polygons that overlap with a portion of corresponding ones of the plurality of shadow models as seen from a viewpoint, the gradation polygons having non-color values and transparency values for the corresponding ones of the shadow models; and

displaying a color for the shadow models based on a background color value behind the shadow models, a transparency value being set for the background color, and a corresponding transparency value being set for the corresponding gradation polygons,

wherein where two or more of the plurality of gradation polygons overlap, the transparency value for the background color is set to the non-transparency value to make the background color non-transparent so that the color of one of the shadow models closer to the viewpoint is calculated based on the background color value behind a closer one of the shadow models and the corresponding transparency value set for the corresponding gradation polygon for the closer one of the shadow models, and

wherein a transparency value is nullified where:

the two or more of the plurality of gradation polygons are larger than corresponding ones of the shadow models,

the corresponding ones of the shadow models do not overlap each other, and

the two or more of the plurality of gradation polygons that correspond to the ones of the shadow models overlap.

10 - 16. (Cancelled).

17. (Currently Amended) An image processing device for performing an image processing movement which generates a shadow of a motion character moving on a display screen, when lights are irradiated onto the motion character by a plurality of light sources, comprising:

a shadow model modeling means for modeling a plurality of shadow models having color information and a transparency of 0% designated corresponding to each of the plurality of light sources;

a gradation polygon modeling means for modeling a plurality of gradation polygons, the plurality of gradation polygons being modeled to overlap with corresponding ones of the plurality of shadow models as seen from a viewpoint, the plurality of gradation polygons being set with a transparency of the corresponding ones of the plurality of shadow models;

a filter polygon modeling means for modeling a filter polygon for cutting off the transparency set to a background color for a gradation polygon closer to the viewpoint; and

a pixel generation means that generates pixels to represent the shadow model based on the background color, the transparency set for the background color, and the transparency set for the corresponding gradation polygon,

wherein where two or more of the plurality of gradation polygons overlap, the filter polygon is arranged between the overlapping gradation polygons so as to alter the transparency for the background color so that the color for a shadow model closer to the viewpoint is calculated based on the background color behind the closer shadow model and the corresponding transparency set for the corresponding gradation polygon for the closer shadow model, and

wherein the filter polygon nullifies a transparency value where:

the two or more of the plurality of gradation polygons are larger than corresponding ones of the shadow models,

the corresponding ones of the shadow models do not overlap each other, and

the two or more of the plurality of gradation polygons that correspond to the ones of the shadow models overlap.

18 - 19. (Cancelled).

20. (Currently Amended) A method for processing an image, comprising:

setting a character model;

setting a plurality of light source models illuminating the character model;

creating a plurality of shadow models to display shadows created by the plurality of light source models, the plurality of shadow models having non-color values and non-transparency values;

setting a plurality of gradation polygons that overlap with a portion of corresponding ones of the plurality of shadow models as seen from a viewpoint, the gradation polygons having non-color values and transparency values for the corresponding ones of the shadow models;

displaying a color for the shadow models based on a background color value behind the shadow models, a transparency value being set for the background color, and a corresponding transparency value being set for the corresponding gradation polygons,

wherein where two or more of the plurality of gradation polygons overlap, the transparency value set for the background color is set to the non-transparency value to make the background color non-transparent so that the color of one of the shadow models closer to the viewpoint is calculated based on the background color value behind a closer one of the shadow models and the corresponding transparency value set for the corresponding gradation polygon for the closer one of the shadow models, and

wherein a transparency value is nullified where:

the two or more of the plurality of gradation polygons are
larger than corresponding ones of the shadow
models,

the corresponding ones of the shadow models do not
overlap each other, and

the two or more of the plurality of gradation polygons that
correspond to the ones of the shadow models
overlap.

21 - 27. (Cancelled).

28. (Currently Amended) A method for generating a shadow of a motion character moving on a display screen, comprising:

modeling a plurality of shadow models having color information and a transparency of 0% designated corresponding to each of the plurality of light sources that are irradiated onto the motion character;

modeling a plurality of gradation polygons, the plurality of gradation polygons being modeled to overlap with corresponding ones of the plurality of shadow models as seen from a viewpoint, the plurality of gradation polygons being set with a transparency of the corresponding ones of the plurality of shadow models;

modeling a filter polygon for cutting off the transparency set to a background color for a gradation polygon closer to the viewpoint; and

generating pixels to represent the shadow model based on the background color, the transparency set for the background color, and the transparency set for the corresponding gradation polygon,

wherein where two or more of the plurality of gradation polygons overlap, the filter polygon is arranged between the overlapping gradation polygons so as to alter the transparency set for the background color so that the color for a shadow model closer to the viewpoint is calculated based on the background color behind the closer shadow model and the corresponding transparency set for the corresponding gradation polygon for the closer shadow model, and

wherein the filter polygon nullifies a transparency value where:

the two or more of the plurality of gradation polygons are larger than corresponding ones of the shadow models,

the corresponding ones of the shadow models do not overlap each other, and

the two or more of the plurality of gradation polygons that correspond to the ones of the shadow models overlap.

29. (New) The image processing device of claim 17, wherein the filter polygon is arranged in advance on one of the plurality of gradation polygons that corresponds to one of the shadow models.
30. (New) The method of claim 28, further comprising arranging the filter polygon in advance on one of the plurality of gradation polygons that corresponds to one of the shadow models.